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530 7590 03/14/2008

LERNER, DAVID, LITTENBERG,
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600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER	
CUTLER, ALBERT H	
ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 03/14/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,683	01/21/2004	Manabu Hara	SONYJP 3.0-355	3355

TITLE OF INVENTION: PIXEL COMPENSATING CIRCUIT, METHOD FOR COMPENSATING PIXELS, AND IMAGE TAKING APPARATUS EMPLOYING SUCH PIXEL COMPENSATING CIRCUIT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1440	$300	$0	$1740	06/16/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

530 7590 03/14/2008

LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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10/761,683	01/21/2004	Manabu Hara	SONYJP 3.0-355	3355

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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1440	$300	$0	$1740	06/16/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
CUTLER, ALBERT H	2622	348-246000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

☐ Issue Fee

☐ Publication Fee (No small entity discount permitted)

☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**

☐ A check is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER	
CUTLER, ALBERT H	
ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 03/14/2008

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 760 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 760 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	10/761,683	HARA, MANABU	
	Examiner	Art Unit	
	ALBERT H. CUTLER	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the Request for Continued Examination filed 3 December 2007*.

2. ☒ The allowed claim(s) is/are *1-18*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. This office action is responsive to communication filed on December 3, 2007. Claims 1-18 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 29, 2007 has been entered.

Allowable Subject Matter

3. Claims 1-18 are allowed.

4. The following is an examiner's statement of reasons for allowance:

Consider claim 1, the closest prior art of record, Kimura(US Patent 7,102,673) teaches:

A pixel compensating circuit for compensating defect pixels(column 5, line 21 through column 9, line 48) comprising:

a color information holding unit for holding plural kinds of color information of a defect pixel and pixels adjacent said defect pixel(Multiple image signals are obtained(i.e. they are held in a holding unit), each signal corresponding to a different calibration sheet, which calibration sheets can correspond to different colors, and differences between the signals are examined to find defective pixels(column 5, line 24

through column 6, line 7). Since entire images are read out, corresponding to different color sheets, information representing plural kinds color information for defect pixels as well as non-defective pixels(i.e. adjacent pixels) is held.);

a difference calculating unit for calculating differences between non-defect color information among said color information of said defect pixel and said color information of said pixels adjacent said defect pixel corresponding to said non-defect color information(See figure 2, column 6, line 19 through column 7, line 14. Multiple calibration sheets can be used(column 5, line 54), and these sheets can be comprised of different colors. However, the difference between the output from every set of two calibration sheets is obtained(column 6, line 5). Therefore, during the readout of an image signal, zero defect color information is obtained at the same time as the defect color information(i.e. the zero defect color information is among the defect information produced by the defective pixel). Differences are obtained between successive image readouts using different color sheets. Therefore differences between zero defect color information, which is among said color information of said defect pixel, and color information of said pixels adjacent said defect pixel, pixels which correspond to zero defect color information, are obtained when comparing two separate images. Because all the pixels are compared, differences for the defect pixels, as well as differences for the adjacent pixels are obtained. The differences between the images are obtained, as shown in figure 2c, in order to find defective pixels.); and

a compensating unit for calculating an average value of said differences for said reference pixel and said defect pixel(In Step 4, of figure 2, the average values of all the

differences(i.e. the differences for reference pixels, defects pixels, and any other pixels) are obtained. See column 6, lines 16-22.), and for compensating defect color information of said defect pixel using said average value(The average values are used to determine defective pixels(Step 5, figure 2, column 6, lines 23-45). Any defective pixel is then compensated by replacing its value with the average value of the surrounding pixels(column 7, lines 34-37).).

However, Kimura does not explicitly teach that the pixel compensation is performed on a video signal, or of a reference pixel determining unit for determining a reference pixel having color information that is the most similar to said non-defect color information.

In addition to the teachings of Kimura, Smith(US Patent 6,970,194) teaches that the pixel compensation is performed on a video signal(column 1, lines 64-67), and of a reference pixel determining unit for determining a reference pixel having color information that is the most similar to said non-defect color information(See column 4, line 25 through column 5, line 9. A possible defective pixel p(c) is compared to all eight neighboring pixels. If the value of pixel p(c) is larger than the largest neighboring value, then p(c) is set to the largest value(i.e. the largest value pixel is most similar to p(c), and is thus set as the reference pixel). If p(c) is smaller than the smallest value, then p(c) is set to the smallest value(i.e. the smallest value pixel is most similar to p(c), and is thus set as the reference pixel).).

However, the prior art or record does not teach, nor reasonably suggest that said color information of said defect pixel includes defective color information and non-

defective color information, or that the difference calculating unit calculates a difference between the non-defective color information of the defect pixel and corresponding color information of said pixels adjacent said defect pixel. The prior art of record also does not explicitly teach that the compensating unit compensates the defective pixel with reference pixel value minus the average value of the differences between the non-defective pixel values of the defect pixel and the corresponding pixel values of the reference pixel as now required by claim 1.

Claims 2-6 are allowed as being dependent upon and allowed claim 1.

Consider claim 7, the closest prior art of record, Kimura(US Patent 7,102,673) teaches:

A pixel compensating method for compensating a defect pixel of an image signal(column 5, line 21 through column 9, line 48), comprising the steps of:

holding plural kinds of color information of defect pixel and pixels adjacent said defect pixel(Multiple image signals are obtained(i.e. they are held in a holding unit), each signal corresponding to a different calibration sheet, which calibration sheets can correspond to different colors, and differences between the signals are examined to find defective pixels(column 5, line 24 through column 6, line 7). Since entire images are read out, corresponding to different color sheets, information representing plural kinds color information for defect pixels as well as non-defective pixels(i.e. adjacent pixels) is held.);

calculating differences between non-defect color information among said color information of said defect pixel and said color information of said pixels adjacent said defect pixel corresponding to said non-defect color information(See figure 2, column 6, line 19 through column 7, line 14. Multiple calibration sheets can be used(column 5, line 54), and these sheets can be comprised of different colors. However, the difference between the output from every set of two calibration sheets is obtained(column 6, line 5). Therefore, during the readout of an image signal, zero defect color information is obtained at the same time as the defect color information(i.e. the zero defect color information is among the defect information produced by the defective pixel). Differences are obtained between successive image readouts using different color sheets. Therefore differences between zero defect color information, which is among said color information of said defect pixel, and color information of said pixels adjacent said defect pixel, pixels which correspond to zero defect color information, are obtained when comparing two separate images. Because all the pixels are compared, differences for the defect pixels, as well as differences for the adjacent pixels are obtained. The differences between the images are obtained, as shown in figure 2c, in order to find defective pixels.);

calculating an average value of said differences for said reference pixel and said defect pixel(In Step 4, of figure 2, the average values of all the differences(i.e. the differences for reference pixels, defects pixels, and any other pixels) are obtained. See column 6, lines 16-22.); and

compensating defect color information of said defect pixel using said average value(The average values are used to determine defective pixels(Step 5, figure 2, column 6, lines 23-45). Any defective pixel is then compensated by replacing its value with the average value of the surrounding pixels(column 7, lines 34-37).).

However, Kimura does not explicitly teach that the image signal is a video signal, or determining a reference pixel having color information that is the most similar to said non-defect color information;

In addition to the teachings of Kimura, Smith(US Patent 6,970,194) teaches that the pixel compensation is performed on a video signal(column 1, lines 64-67), and of a reference pixel determining unit for determining a reference pixel having color information that is the most similar to said non-defect color information(See column 4, line 25 through column 5, line 9. A possible defective pixel p(c) is compared to all eight neighboring pixels. If the value of pixel p(c) is larger than the largest neighboring value, then p(c) is set to the largest value(i.e. the largest value pixel is most similar to p(c), and is thus set as the reference pixel). If p(c) is smaller than the smallest value, then p(c) is set to the smallest value(i.e. the smallest value pixel is most similar to p(c), and is thus set as the reference pixel).).

However, the prior art or record does not teach, nor reasonably suggest that said color information of said defect pixel includes defective color information and non-defective color information, or that the difference calculating unit calculates a difference between the non-defective color information of the defect pixel and corresponding color information of said pixels adjacent said defect pixel. The prior art of record also does

not explicitly teach that the compensating unit compensates the defective pixel with reference pixel value minus the average value of the differences between the non-defective pixel values of the defect pixel and the corresponding pixel values of the reference pixel as now required by claim 7.

Claims 8-12 are allowed as being dependent upon and allowed claim 7.

Consider claim 13, the closest prior art of record, Kimura(US Patent 7,102,673) teaches:

An image taking apparatus(column 1, lines 6-14) including a pixel compensating circuit for compensating defect pixels included in an image signal(column 5, line 21 through column 9, line 48), wherein said pixel compensating circuit comprising:

a color information holding unit for holding plural kinds of color information of a defect pixel and pixels adjacent said defect pixel(Multiple image signals are obtained(i.e. they are held in a holding unit), each signal corresponding to a different calibration sheet, which calibration sheets can correspond to different colors, and differences between the signals are examined to find defective pixels(column 5, line 24 through column 6, line 7). Since entire images are read out, corresponding to different color sheets, information representing plural kinds color information for defect pixels as well as non-defective pixels(i.e. adjacent pixels) is held.);

a difference calculating unit for calculating differences between non-defect color information among said color information of said defect pixel and said color information

of said pixels adjacent said defect pixel corresponding to said non-defect color information(See figure 2, column 6, line 19 through column 7, line 14. Multiple calibration sheets can be used(column 5, line 54), and these sheets can be comprised of different colors. However, the difference between the output from every set of two calibration sheets is obtained(column 6, line 5). Therefore, during the readout of an image signal, zero defect color information is obtained at the same time as the defect color information(i.e. the zero defect color information is among the defect information produced by the defective pixel). Differences are obtained between successive image readouts using different color sheets. Therefore differences between zero defect color information, which is among said color information of said defect pixel, and color information of said pixels adjacent said defect pixel, pixels which correspond to zero defect color information, are obtained when comparing two separate images. Because all the pixels are compared, differences for the defect pixels, as well as differences for the adjacent pixels are obtained. The differences between the images are obtained, as shown in figure 2c, in order to find defective pixels.); and

a compensating unit for calculating average values of said differences for said reference pixel and said defect pixel(In Step 4, of figure 2, the average values of all the differences(i.e. the differences for reference pixels, defects pixels, and any other pixels) are obtained. See column 6, lines 16-22.), and for compensating defect color information of said defect pixel using said average value(The average values are used to determine defective pixels(Step 5, figure 2, column 6, lines 23-45). Any defective

pixel is then compensated by replacing its value with the average value of the surrounding pixels(column 7, lines 34-37).).

However, Kimura does not explicitly teach that the pixel compensation is performed on a video signal, or of a reference pixel determining unit for determining a reference pixel having color information that is the most similar to said non-defect color information.

In addition to the teachings of Kimura, Smith(US Patent 6,970,194) teaches that the pixel compensation is performed on a video signal(column 1, lines 64-67), and of a reference pixel determining unit for determining a reference pixel having color information that is the most similar to said non-defect color information(See column 4, line 25 through column 5, line 9. A possible defective pixel p(c) is compared to all eight neighboring pixels. If the value of pixel p(c) is larger than the largest neighboring value, then p(c) is set to the largest value(i.e. the largest value pixel is most similar to p(c), and is thus set as the reference pixel). If p(c) is smaller than the smallest value, then p(c) is set to the smallest value(i.e. the smallest value pixel is most similar to p(c), and is thus set as the reference pixel).).

However, the prior art or record does not teach, nor reasonably suggest that said color information of said defect pixel includes defective color information and non-defective color information, or that the difference calculating unit calculates a difference between the non-defective color information of the defect pixel and corresponding color information of said pixels adjacent said defect pixel. The prior art of record also does not explicitly teach that the compensating unit compensates the defective pixel with

reference pixel value minus the average value of the differences between the non-defective pixel values of the defect pixel and the corresponding pixel values of the reference pixel as now required by claim 13.

Claims 14-18 are allowed as being dependent upon and allowed claim 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chapman et al.(US 2004/0036788) teach of holding color information of a pixel containing defect color information and non-defect color information, and of compensating for the defect color information based on the non-defect color information and the color information of neighboring pixels(see figures 5A and 7, paragraphs 104-132).

Hamilton, Jr.(US 6,900,836) teaches of compensating for a defect pixel using pixels of the same color as well as pixels of different colors(column 4, line 39 through column 8, line 46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT H. CUTLER whose telephone number is (571)270-1460. The examiner can normally be reached on Mon-Thu (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571)-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

/Ngoc-Yen T. VU/

Supervisory Patent Examiner, Art Unit 2622